

CLAIMS**I CLAIM:**

- 5 1. A position activated switch comprising:
a switch body, and
an internal cavity of the switch body including a truncated conical surface terminating at an
open end in a surface of revolution, the surface of revolution sloping outwardly from the open end
of the truncated conical surface, and a ramp surface interrupting the surface of revolution, the ramp
10 surface extending into the truncated conical surface.
2. The position activated switch as claimed in claim 1, wherein a mercury ball is located in
the internal cavity.
- 15 3. The position activated switch as claimed in claim 2, wherein two electrical contact probes
are located at a closed end of the truncated conical surface.
4. The position activated switch as claimed in claim 3, wherein contact of the mercury ball
with the two electrical contact probes completes an electrical circuit.

20

5. The position activated switch as claimed in claim 3, wherein said mercury ball moves from the surface of revolution into the truncated conical surface via the ramp surface when the switch body is tilted.

5 6. The position activated switch as claimed in claim 1, wherein the internal cavity is sealed by a closure cap.

7. The position activated switch as claimed in claim 3, wherein the two electrical contact probes extend partially into the switch body and extend partially out of the switch body.

10 8. A patent ambulation motion detector comprising:
a switch body,
an internal cavity of the switch body including a truncated conical surface terminating at an open end in a surface of revolution, the surface of revolution sloping outwardly from the open end
15 of the truncated conical surface, and a ramp surface interrupting the surface of revolution, the ramp surface extending into the truncated conical surface,
a mounting flange for supporting the switch body.

9. The patent ambulation motion detector as claimed in claim 8, wherein a mercury ball is
20 located in the internal cavity.

10. The patent ambulation motion detector as claimed in claim 9, wherein two electrical contact probes are located at a closed end of the truncated conical surface.

11. The patent ambulation motion detector as claimed in claim 10, wherein contact of the mercury ball with the two electrical contact probes completes an electrical circuit.

12. The patent ambulation motion detector as claimed in claim 10, wherein said mercury ball moves from the surface of revolution into the truncated conical surface via the ramp surface when the switch body is tilted.

10

13. The patent ambulation motion detector as claimed in claim 8, wherein the internal cavity is sealed by a closure cap.

14. The patent ambulation motion detector as claimed in claim 10, wherein the two electrical contact probes extend partially into the switch body and extend partially out of the switch body.

15

15. The patent ambulation motion detector as claimed in claim 9, wherein the mercury ball has a diameter of 3mm.

20

16. The patent ambulation motion detector 8, wherein the mounting flange has two mounting openings.